HALY 'ABBAS,

Iranian Celebrated Physician who wrote an excellently organized Medical compendium

Naser Pūyan

Abstract

One of the greatest physicians and encyclopedists in middle Ages in Europe was born in al-Ahwaz (c.930) from Old Persian stock. 'Alī was moved to Shīrāz at an early age and made his medical studies under a physician of this city, Abū Mahir Mūsā ibn Sayyar. He practised medicine in Baghdad in mid – tenth century and served as physician to 'Adud al-Dawla, to whom he dedicated his only composition, "Kāmil al- Sina'a / Kitāb al-Malikī (The Complete Book of the Medical Art / The Royal Book).

His principal work Kāmil al-Sinā 'a was divided into two sections of theoretical and practical medicine, and each section contained 10 tracts on specialized topics. This compendium was deliberately written to fall midway between the lengthly al-Hāwī and brief al-Mansurī, the famous works of Rhazes. The Medieval Latin translators named the above mentioned magnum opus the "Liber Regius". It covers the entire spectrum of Arabic (Islamic) medicine, including one chapter on diseases of the teeth.

Haly 'Abbas' exact date of death is not known precisely, but according to some sources, he died between A.D.982 and 995.

Key words: Medicine, medical work, aphorism and, eight great physicians.

Haly 'Abbas

('Alī ibn al-'Abbās al-Majūsī al-Arrijanī)

Shorty after the death of Rhazes, outstanding Persian physicion and philosopher, another Persian physician 'Alī ibn al-'Abbās al-Majūsī al-Arrijanī", commonly known to the West Haly Abbas appeared. His birth date is not clear precisely but in some sources, it has been registered A.D.930 (A. H. 318). He was born in al-Ahwāz or Bihbihān (Arridjān, and for this very reason was known "Alī ibn al-'Abbās al-Majūsī al-Arrijanī²." Religion point of wiew, he was from Old Persian stock (Zoroastrianism) as his title al-Madjūsī shows. 'Alī probably moved to Shīrāz at an early date and made his medical studies under a physician of this city Abū Māhir Mūsā ibn Yūsuf ibn Sayyār Shīrāzī (of Shiraz), and dedicated his famous work "Kāmil al- sinā'a" or Kitāb al-Malikī*" to its ruler "Adud al-Dawla the Buwayhid. The Medieval Latin translators named his magnus opus the Liber Reius. This famous medical work derives its title form the dedication to 'Adud al-Dawla. The exact date of Haly 'Abbas' death is not known, but according to some sources, it occurred between A.D. 982 and 995^{3} .

Haly 'Abbās (like Rhazes and Avicenna), based his anatomical knowledge largely on Galen and was in turn translated into Latin and revered as authorities in medieval Europe⁴.

^{1.} Sarmadi Mohammad, Taghi, A Research on the History of the World Medicine and Treatment Up to the Present Era, Book 1, Pioneers and Islmic Medicine, Sarmadi Publications, Second Edition, Tehran, 2001, p. 255.

2. I bid, translated by professor saeed Kanani Zanjani, M.D., Sarmadi Publications, Tehran, 2002, P. 344.

* It is also called, "Kāmil al- sinā'a al-tibbiya" "Le livre Royal et l'art Medical", "Liber totius medicinae".

3. Brill, E. J. Encyclopedia of Islam, vol.1, Leiden, 1986, New edition, p.381.

^{4.} Encyclopedia International, vol. 9, Grolier, 1975, New York, p. 35.

Haly 'Abbās.

'Alī ibn al-'Abbās -Majūsī 'Ahwāzī known in the West as Haly 'Abbās. His famous al- Kitāb al-Malikī became the standard textbook of medicine for all medical students during medieval centuries. (The Pamphlet of Islamic Medical Association of North America (IMANA)& (IIIM), page 4.)

He practised medicine in Baghdad and served as physician to 'Adud al-Dawla (reigned 338-372 A.H. / 949-982 A.D.), the founder of a famous hospital named 'Adudī Hospital in Baghdad in mid-tenth century¹.

^{1.} Loudon Irvine, the Oxfor Illustrated History of Western Medicine, Oxford, New York, 1997, p. 44.

After Rhazes' huge encyclopedia al-Hawī, Haly 'Abbās wrote Kitāb al-Malikī, an excellently organized medical compendium which covered the entire spectrum of Arabic medicine, and was known in the West as The Royal Book¹. Moreover, the first large Arabic encyclopedia to be translated into Latin was this book. "In Europe this comprehensive and well-organized medical compendium was first known as the Pantegni, in a Latin paraphrase made by Constantine the African*, who did not credit Haly 'Abbās as the author. It also circulated in a collection of translations of medical writings of Ishāq ibn Sulaymān al-Isrā'īlī, who died about 955. Thus Europeans initially associated the book either with Constantine himself or with Isaac Judaeus, as the Egyptian - bron Jewish physician Ishāq ibn Sulaymān al-Isrā'īlī was known in Europe. It was not until a new Latin translation titled Liber Regius was made in 1127 by Stephen of Antioch that Europe knew the encyclopedia as a work of 'Haly Abbas²."

In this encyclopedia which covered all knowledge "of Arabic medicine, including one chapter on diseases of teeth; he, too, relied on cautery with red-hot needles to prevent odontalgia

^{1.} I bid, p. 44.

^{*.} Canstantine the African (Constantinus Africagnus) born in Carthage about 1010 A.D.,traveled in Syria, India, Egypt, and Ethiopia for four decades gathering medical manuscripts. Constantine by conversant with Greek, Arabic, and Latin was uniquely qualifed to study and translate the medicine of the Eastern (Islamic) world. In his return to Carthage, he was accused of practicing magic. Out of necessity, Constantine fled to Salerno (in Italy)and then to Monte Cassino (a monastery in Italy) in 1076. Constantine was most important for his translations into Latin of ancient Greek medical texts (often done from their Arabic translations) but also rendering Arabic works such as the Liber Regalis (The Royal Book) of Haly 'Abbas. He died in Monte Casino in 1087. (Medicine an, Illustrated History. p.319.)

(tooth ache). If this treatment failed to relieve the pain, Ali 'Abbās advised extraction¹."

Important description and advice

Haly 'Abbas as well as writing his famaus compendium, described goiter, malignant antrax, smallpox, gave contraceptive advice².

Criticism on al-Hāwī

Haly 'Abbas about 50 years after the demise of al-Rāzī, outstanding Persian physician, criticised his magnum opus, al-Hāwī, and in his Malikī wrote: "As to his book which is known as al-Hāwī, I found that he mentions in it everything the knowledge of which is necessary to the medical man, concerning bygiene and medical and dietetical treatment of diseases and their symptoms. He did not neglect the smallest thing required by the student of this art concerning treatment of disases and illnesses. But he made no mention at all of natural matters, such as the elements, the temperaments and the mixtures of the humours. Nor did he speak of anatomy and surgery. He wrote, moreover, without order and method, neglecting the side of scholastic learning. He omitted to subdivide his book into discourses, sections and chapters, as might have been expected from his vast knowledge of the medical art and from his talent as a writer. Far be it from me to contest his excellence or to deny his knowledge of the medical art or his eminence as an author.

^{1.} Ring Malvine E., Dentistry, An Illustrated History, Abradale Press, Harry N. Abrams, Inc. Publishers, p. 66.

^{2.} Lee H.S.J., Medical Millennium, The Parthenon Publishing Group, New York, London, 2000, p.1.

Considering this condition of imagining the causes of it by comparison with the vast knowledge shown in this book, I think there are two possibilities; either he composed it and collected in the entire field of medicine as a special memorandum of reference for himself, comprising hygiene and therapeutics, for his old age and time of forgetfulness; or being afraid of damage which might occur to his library, which was to be made good in this case by the book in question. Likewise in order to relieve his writing from bulkiness and in order to be useful to the people and to create for himself a good memorial for coming generations he provided reference notes for his entire text, put them in order and compared each one with its like and fitted it in its chapter according to his knowledge of appropriateness in this art. In this way the book should be complete and perfect.

He was, however, prevented from continuing it by hindrances and death befell him before its completion. If such was his aim, he treated his subject at too great length and made his book too voluminous without any urgent necessity to claim in his favour. This was the reason why most scholars were not able to order and purchase copies of the book, except a few wealthy literary men, and so copies are scarce. He proceeded in such a manner that for each disease, its causes, symptoms and treatment, he mentioned the sayings of every ancient and modern physician on the disease in question from Hippocrates and Galen down to Ishāq bin Hunayn, and all the physicians, ancient and modern, who lived in between them, without omitting the sayings of any one of them and reference to them in this book, so that the entirety of medical literature was comprised in this book. You must know, however, that skilful and experienced physicians agree about the nature of diseases, their causes, symptoms and mediacal treatment, and that there exists no marked difference between their opinions, except that they treat more or less of the matter and that they speak in different terms, because the rules and the schools they follow in the knowledge of diseases, their causes and treatment, are obviously the same. If this is so, it was not necessary to record the sayings of all the ancient and modern physicians and the reiteration of their utterances, since they all repeat the same things*1.".

Medical work

The Kāmil al- Sinā'a was deliberately written to fall mid-way between the lengthly al- Hāwī and the brief al-Mansurī, al-Rāzī's famous works. This magnum opus upon which Haly 'Abbas' international importance and reputation depends, immediately recognized as a masterpiece and was adopted as the chief text-book of medicine for medical students in Europe. Some hundred years later was overshaded by Avicenna's famous Canon. But it remained adequately popular to be translated into Latin in full by Stephan of Antioch in 1127 and the translation to be printed in Venice in 1492 and Lyons in 1523 under the title "Liber medicinae necessaria continens quem Haly filius Abbas editit regique inscript unde et reglis dispostonis nomen assumpsit²."

The surgical part of the book had already been translated by Constantine the African in the 11th century and was used by the Medical School of Salerno (1539). The Arabic text was

^{*.} Liber Regius, Vol. 1, p. 5

^{1.} Elgood Cyril, a Medical, History of Persia and the Eastern Caliphate, Cambridge University Press, 1951, pp. 199-200.

^{2.} Na
Jābādī, Dr. Mahmud Tārīkh-i Tibb dar Iran pas az Islam, In tishārā
t-I Danishgah-i Tehran, 1375 (1996), p. 450.

reproduced in Cairo, Būlaq in 1294 (1877), and in 1903 the anatomical part was translated into French¹.

Kāmil al- sinā'a at one glance

It was divided into two parts theoretical and practical medicine. Each part contained 10 tracts on specialized topics² and totally is 20 tracts.

The tracts of first section (Book I) are as fallows:

Tract I: There are 25 topics in this tract, consisting of the preface of the book and its parts.

Tract II: It has 16 topics including the principles of anatomy related to the organs of the body.

Tract III: This tract with 37 topics deals with principles of anatomy and physiological muscles of the body (voluntary and involuntary muscles).

Tract IV: It has 20 topics and discusses about generalities related to forces, sensual and animal power, and physiology of respiratory system, etc.

Tract V: It is in 38 topics, including the generalities regarding the affairs which are not related to the nature of human body, like: air, sport, bathing, aliments, drinks, flowers and perfumes, clothes, sleep and wakefulness, and their effects on the body health, and the like.

Tract VI: Including 36 topics discusses on the generalities that are related to morbidity and causes of diseases.

^{1.} Encyclopedia of Islam, vol. 1 p.381.

^{2.} Sebastian, Anton Dates in Medicine, The Parthenon Publishing Group, New York, London, 1999, p.6.

Tract VII: Including 18 topics, are about diseases and their classification which generally are concerning symptoms, morbidity, physical secretions and the like.

Tract VIII: This tract is in 22 topics and discusses about various fevers.

Tract IX: It is in 41 topics and deals with various diseases one by one.

Tract X: In 12 Topics includes several generalities regarding the period of diseases and their conclusions.

The second part (Book II) includes the following tracts:

Tract XI: In 31 topics deals with public health.

Tract XII: This tract has 57 topics, and is concerning treatment of diseases and various means of their remedy.

Tract XIII: It includes 34 topics and discusses on the treatment of different fevers (microbial and non – microbial).

Tract XIV: In 53 topics and some of them deal with exanthematous fevers, cutaneous diseases, poisoning arising from domestic and wild animals, and herbal and mineral poisonings.

Tract XV: This tract in 82 topics is concerning the diseases of nervous system, and diseases of eyes, ears, nose, head, face, hairs, mouth, tongue, and teeth.

Tract XVI: with 16 topics, talks conerning the diseases of the respiratory and circulatory systems.

Tract XVII: It is in 51 topics and discusses about the diseases of digestive system, and diseases of gland and their enclosures, kidneys, and bladder.

Tract XVIII: Which includes 35 topics discusses on the diseases of genital organs of men and women, women's breast, and several other topics.

Tract XIX: This tract with 110 topics includes an entire course of surgery until Haly Abbas' time.

Tract XX: It is in 30 topics and includes a complete course of pharmaceutics, Pharmacology, and procedures of recipe – writing*1.

A medical prescripition from Haly 'Abbas

Take 15 methoals (about 5 grams) of red arsenic, and 8 methoals of yellow sulfur, with some extract of walnut leaves, make ointment of them, then rub with it on the body.

Then, if it is summer, stand in the sun and if it is winter, stay in the bath. After sometime, rub some water of marsh – mallow decoction of violet on the body.

Another medical prescripition

Take some white sandal, barely flour, violet, and sweet clover. Then, grind these stuffs and pass them through soft cloth (silk cloth), and mix them with molten wax. Afterward, prepare of them an ointment and rub it on the chest.

Haly 'Abbas' Aphorisms

Haly 'Abbas in his famous encyclopedia Malikī has inserted some wise and fruitful advices, Precepts of Hippocrites*, and of

^{*.} Formerly, some of the practitioners as well as practicing medicine, had pharmacies at their own clinics. They usually supervised the pharmacological affairs and sometimes, they themselves gave the necessary prescription and also sold medicine.

^{1.} Tārīkh-I Tbib dar Iran pas az Islam, pp. 458 – 465.

^{*.} Hippocrates (460-377B.C.) father of medicine, the Greek physician and teacher, insisted that his students should follow a strict ethical code; they all had to take the Hippocratic Oath, and doctors continued to swear this oath until recently. The Hippocatic. Oath:

several physicians and ancient scholars. The medical Aphoisms are as follows:

- One who wishes to become a learned physician should follow and practise the Hippocratic Oath that he has left for physicins.
- Before anything else, pray and obey the almighty, glorious and dignified God. Then honor your teachers and try to be at their service and respect them.
- As you endear your parents and make them partaking of your property, treat your teachers in the same way.
- Treat your brother your teacher's children. One who wants to learn medicine teaches him / her without any recompense and wage, and reckons him / her as your own son / daughter or your

I swear by Apollo Physician, by Asklepios, by Health, by Panacea and by all the gods and goddesses, making them my witnesses that I will carry out, according to my ability and judgement, this oath and this indenture. To hold my teacher in this art equal to my own parents; to make him partener to my livelibood; when he is in need of money to share mine with him; to consider his family as my own brothers, and to teach them this art, if they want to learn it, without fee or indenture; to impart precept, oral instruction, and all other instruction to my own sons, the sons of my teacher, and nobody else. I will use treatment to help the sick according to my ability and judgement, but never with a view of injury and wrong-doing. Neither will I administer a poison to anyone when asked to do so, nor will I suggest such a course. Similarly, I will not give a woman a pessary to cause abortion. But I will keep pure and holy both my life and my art. I will not use the knife, not even, verily, on sufferers from the stone, but I will give place to such as be craftsmen therein. Into whatsoever houses I enter, I will enter to help the sick, and I wil abstain from all intentional wrong doing and harm, especially from abusing the bodies of man or woman, bond or free. And whatsovevr I shall see or hear in the course of my profession, as well as outside my profession in my intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be boly secrets. Now if I carry out this oath, and break it not, may I gain forever reputation among all men for my life and for my art; but if I transgress it and forswear myself, may the opposite befall me.

(Jennifer Cochrane, An Illustrated History of Medicine, pp.17-18.)

teacher's children. Thus, do not let the humble and baseless people study this noble science.

- A physician should try to treat his patient by food or medicine. The treatment of a patient should not be for the sake of raising money, and the medical action should not be for recompense and reward. The physician should never advise anybody to use dangerous and harmful medicine, and he should not even describe these kind drugs. He also should not guide and even talk concerning the mentioned medicine. A physician should avoid of ordering drugs for abortion, should not recommend them to anybody.
- A physician should be a neat, pious, theist, and good humored person. He should be honest with regard to women, whether she is a lady or a female slave, and should not enter into their lodgings, except for treatment and medical purposes.
- A physician should preserve his patients' secrets and avoid of disclosing their hiddens to their relatives and strangers, because, many patients do not let their parents know their secrets, but reveal them to physicians very easily. So, the physicians should do their best to preserve the patients' secrets (like the pains related to hemorrhoid, the womb, and the like). The physician should be more careful than the patient in this point of view.
- It is necessary for a physician, to practise what Hippocrates recommended regarding the physicians. He should be merciful, chaste, kind, benevolent, and well-spoken person. The physician should try to cure the patients, the poor and the indigents seriously as well. He should not think of profit and reward from this group of helpless people at all; on the contrary, should bring together their drugs from his own purse. If this is not possible, should visit them, at all hours especially if the ailment is acute

and fatal; because these kinds of diseases are changeable quickly.

- It does not suit a physician, to live in pleasure and amuse himself / herself in debauchery. He/she should abstain in drinking wine and other alcoholic drinks, because it is noxious to the physical health and depraves the mind. He/she ahould study the medical texts continuously, and whatever reads should learn theoretically and practically and should try not to forget it. This method helps the physician not to refer to the medical text anymore. Furthermore, if a book is damaged accidentally, the physician would refer to the qualifications preserved in his memory.
- Naturally, old age is the mother of forgetfulness, so to remember the subjects easily; they should be learned during youthfulness.
- A medical science seeker for development of his knowledge and extend it to an update level, has to practice medicine in hospitals, among the parients at their lodgings,in front of wise teachers and ingenious physicians. In this way, he becomes informed of the commencement and the end, goodness and badness, various diagnoses, and other conditions of the patients. If a physician practises like this, he will acquire an exalted position in medicine.
- Therefore, anybody who wishes to become an ingenious learned physician should carry out the mentioned aphorisms, instructions, and recommendations and should keep them in his mind, and should fall into the habit of these admirable qualities. Moreover, the physician should be persistent in performing them. If a physician practises these aphorisms, his practical medicine will become effective and fruitful. Thus, people will

rely upon his medical practice and will believe him/her. The physician also will be enjoyed of their friendship and financial profits.

• God is wiser and higher than everybody and aware of circumstances¹.

Haly 'Abbās among eight great physicians

Geoffrey Chaucer (c. 1340 – 1400), the founder of the English poetic tradition², wrote in his prologue to the "Canterbury Tales", naming the great physicians of the past that his fourteenth – century audience could be expected to recognize. In the list are five Greek, three Iranian, and one Syriac figures:

Aesculapius (or Asclepius), the focus of a Greek healing cult.

- **1. Hippocrates** (or Ypocras, as Chaucer called him), a fifth to fourth century B.C. physician whose name is associated with a fundamental collection of medical writings.
- **2. Rufus of Ephesus,** in Asia Minor, a physician of the first century A.D. who composed over sixty Greek medical treatises.
- **3. Dioscorides,** whose treatise on medicinal substances written about A.D. 77 formed the basis of pharmaceutics for centuries.
- **4. Galen** (second, century A.D.), the most influential figure in the history of medicine.

Chaucer then goes to name the celebrated physicians from the medical Islamic world:

- **5.** Haly 'Abbās, a tenth century medical encyclopedist of Persia.
- **6. Ibn Sarābiyūn** (or Serapion), a Syriac physician of the ninth century.

^{1.} Ibid, PP. 450 – 458.

^{2.} Encyclopedia International, vol. 3, p. 244.

- **7. Al-Rāzī** (from Iran), whom Europe knew by the Latinized form of his name Razis or Rhazes, the great clinician of the early tenth century.
- **8.** Avicen, or Avicenna (from Iran), as other Europeans called him, referring to Ibn Sinā, whose early eleventh century medical encyclopedia Canon was as important in Europe as it was in the Middle East¹.

Conclusion

Following Galen (129-200), the famous Greek physician and prolific writer, the study of medicine and anatomy floundered for many centuries. Consequently the leadership of medical knowledge passed to the world of Islam. In fact, Galen and other Greek writer's works were translated into Arabic. Haly 'Abbas (like two great Iranian writers, Rhazes ans Avicenna) based his medical anatomical knowledge largely on Galen and was in turn translated into Lalin, and revered authorities in medieval Europe. That is to say, Galenic medicine and anatomy were introduced in Arabic form, in particular via the medical compendium of Haly 'Abbas, 'Kāmil al- sina 'a and the Introduction of Johannitius (an abbreviated version of Hunayn ibn Ishāq's Questions and Answers). Moreover, in Europe, Kamil al-sina'a, because of its importance was immediately recognized as master piece medical work and was adopted as the chief text book to medicine for students. The surgical section of the above mentioned compendium was translated by Constantitine the African in eleventh century and was used by the medical school of Salerno.

Vaser Pūyar

Haly 'Abbas as well as writing his magnum opus, Kāmil al-Sina'a, he described goiter, malignant antrax, smallpox, and gave contraceptive advice. In dentistry he relied on cautery with redhot needles to prevent odontalgia. If this trealment failed to relief the pain he advised extraction.

He was also one of the four founders of Islamic Medicine whilst, the others were Ibn Rabban al-Tabarī, Rhazes, and Avicenna.

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The title page of 1996 German printing of Kamil al-sina'a Part II, in English

كامل الصناعة الطبية

لعلي بن العباس المجوسي (القرن ٤هـ/١٠)

الجزء الأول

١٤١٧هـ - ١٩٩٦م معهد تاريخ العلوم العربية والإسلامية في إطار جامعة فرانكفورت - جمهورية ألمانيا الاتحادية

The title page of 1996 German printing of Kāmil alsinā'a, Part I.

المقالة الاولى) من المؤه الاولى من كاب كامل السناعة العامية المعروف الملكى والمنفعلي بن المعاس المجتوبي المتطب تلميذاً في ماهر وسى بن سدار المجتوبي وهي جسة وعشرون بالإ الباب الاولى) في صدر المحتاب في ذكر وصابا القراط وغير من قدما المتطبين عقد كرالرؤس المثانية التي يغيف ان تعلم قبل قرارة من كاكب و في قسمة العلم ه في ذكر معرفة الاستقصات المنابع و في مصدة اصناف المزاج كل واسدمن أصناف المزاج ح في تعرف مزاج كل واسدمن الناس بالعاب عالى تقدوف مزاج كل واسدمن وسائر المعاض بي في تعرف مزاج الله المدن بعد في تعرف مزاج المعدن مزاج اللائلين بعد في تعرف مزاج الكند بد في تعرف مزاج اللائلين بعد في تعرف مزاج المعدن مزاج الله المن بعد في تعرف مزاج المدن بعد في تعرف مزاج الله المنابع التي تعرف مزاج الإناب بعد في تعرف المنابع ال

(البابالاولفى صدرالكاب)

(قال) على من العباس ان أحق ما ايندئ به في جميع الاموروا لاحوال جدد الله والمشاعلية والشكر إدفاد الجذر شالق الخاق وقدرته وباسط الرق بحكمة والمنان على عباده وقضاله والمعطى الهمما يقدرون به على اصلاح معايشهم في الدنيا والذوذ في الاشترة وهوالمه قل الذي هو ميب لدكل خبرومة تناح لمكل فقع وسمل الي النحاة ويه فضل اقدع وجل الانسمان على سنائر ما خلق اسفة بعدداته وشكر والسلام على سأروسله والسلام على سأروسله أمد وصلاة تستغرق جل المنتهى أو المدد (و دحد) فهذا كاب المسلم المدد (و دحد) فهذا كاب المسلم المدد وردم وتسم المدد ومن المسلم المدد ومن أهل المسلامية ومن أو المناهم في المناهم أن المناهم في خطبة المناهم واختاره في المناهم المناهم

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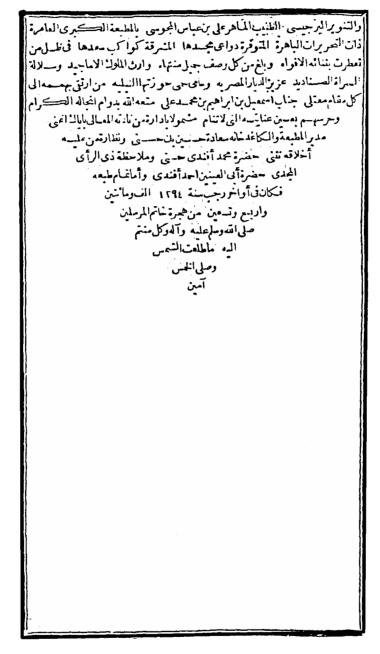
كامل الصناعة الطبية

لعلي بن العباس المجوسي (القرن ٤ه/١٠م)

الجزء الثاني

١٤١٧هـ - ١٩٩٦م معهد تاريخ العلوم العربية والإسلامية في إطار جامعة فرانكفورت - جمهورية ألمانيا الاتحادية

The title page of 1996 German printing of Kāmil al-sinā'a, Part II. Firtst page of 1996 German printing of Kāmil al-sinā'a, Part II.



Last page of 1996 German printing of Kāmil al-sinā'a, Part II.

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